

| 0.00

# 1	01/30 08:00	To 01/30 13:56	5.93	RF2 trip	[RF]
	0.42 Replaced blown fuse, refilled ring				
# 2	01/30 14:21	To 02/06 03:27	157.10	Bad CMPSI card	[DIAG]
	1.08 Investigation, refill				
# 3	02/06 04:31	To 02/06 07:59	3.47	Int Dump: End of Period	
	0.00				

	0.01				
# 4	02/07 08:00	To 02/08 13:33	29.55	Human Error	[RF]
	0.56 Reset trip, refilled ring				
# 5	02/08 14:07	To 02/13 07:59	113.88	Int Dump: End of Period	
	0.00				

	0.01				
# 6	02/14 08:00	To 02/19 07:59	119.99	Int Dump: End of Period	
	0.00				

	1.98 ComEd Power Sag, condition Inj. P.S., refill {Other				
# 8	02/21 09:58	To 02/23 21:23	59.41	S30B:Q2:PS failure [PS]	
	1.02 PS swap-out, refilled				
# 9	02/23 22:24	To 02/27 07:59	81.59	Int Dump: End of Period	
	0.00				

	0.00				
# 10	02/28 08:00	To 03/06 07:59	144.00	Int Dump: End of Period	
	0.00				

	0.05				
# 11	03/07 08:02	To 03/11 13:24	100.36	Raw P.S. failed [PS]	
	2.54 Repaired supply and GESPEC, refilled				
# 12	03/11 15:56	To 03/12 08:00	16.06	Int Dump: End of Period	
	-0.00				

	0.00				
# 13	03/14 08:00	To 03/20 07:59	143.99	Int Dump: End of Period	
	0.00				

	0.00				
# 14	03/21 08:00	To 03/22 18:12	34.21	Raw P.S. trip [PS]	
	2.36 Condition tripped PS,1.1hr[PS];human error,1.3[OA]				
# 15	03/22 20:34	To 03/23 00:22	3.80	Tripped Raw P.S. [PS]	
	2.86 Repaired supply, conditioned, refilled				

```
# 16 03/23 03:14 To 03/23 14:30 11.27 | RF2 Crowbar trip [RF]
| 0.83 Investigation, refill
# 17 03/23 15:19 To 03/25 13:24 46.08 | Under investigation
| 1.39
# 18 03/25 14:47 To 03/26 09:45 18.97 | RF2 Circ Flow trip [RF]
| 0.81 Investigation, refill
# 19 03/26 10:34 To 03/27 08:00 21.43 | Int Dump: End of Period
| -0.00
```

```
-----
| 0.01
# 20 03/28 08:00 To 03/28 23:52 15.87 | 4ID PSS trip [SI]
| 1.37 Investigation,condition PS,0.89hr{SI},0.48hr[OA]
# 21 03/29 01:14 To 04/02 07:59 102.75 | Int Dump: End of Period
| 0.00
```

```
-----
| 0.01
# 22 04/04 08:00 To 04/05 19:15 35.26 | RF4 Anode V Drop [RF]
| 1.49 Investigation, refill of ring
# 23 04/05 20:45 To 04/10 08:00 107.25 | Int Dump: End of Period
| -0.00
```

```
-----
| -0.01
# 24 04/11 08:00 To 04/16 09:40 121.66 | CMPSI card failed [DIAG]
| 1.53 S35A:V3's CMPSI card replaced, refilled
# 25 04/16 11:12 To 04/17 07:59 20.79 | Int Dump: End of Period
| 0.00
```

Top-Up Mode Statistics

Target Current Range 2.0, Minimum Injector Downtime = 8.0 minutes

Total

```
Current in Range during Scheduled Topup Time 97.73 %
Current in Range during Delivered Beam Time 99.18 %
Injector Availability 99.10 %
```

Period Beginning 01/30/2007 08:00

```
Current in Range 98.67 %
Injector Availability 98.53 %
Out of Range at: 02/02/2007 17:35:50 to 02/02/2007 17:56:30 :
20.67 minutes
Injector downtime: 02/02/2007 17:30:55 to 02/02/2007 17:56:25 :
25.50 minutes
Out of Range at: 02/02/2007 19:07:40 to 02/02/2007 19:16:30 :
8.83 minutes
Injector downtime: 02/02/2007 19:02:45 to 02/02/2007 19:16:25 :
13.67 minutes
Out of Range at: 02/04/2007 22:15:40 to 02/04/2007 23:58:50 :
103.17 minutes
Injector downtime: 02/04/2007 22:10:45 to 02/04/2007 23:58:45 :
108.00 minutes
```

Period Beginning 02/07/2007 08:00
Current in Range 98.14 %
Injector Availability 98.04 %
Out of Range at: 02/09/2007 00:04:50 to 02/09/2007 01:20:20 :
75.50 minutes
Injector downtime: 02/08/2007 23:59:55 to 02/09/2007 01:19:40 :
79.75 minutes
Out of Range at: 02/12/2007 08:16:40 to 02/12/2007 09:41:10 :
84.50 minutes
Injector downtime: 02/12/2007 08:11:45 to 02/12/2007 09:41:05 :
89.33 minutes

Period Beginning 02/14/2007 08:00
Current in Range 100.00 %
Injector Availability 100.00 %

Period Beginning 02/21/2007 08:00
Current in Range 98.59 %
Injector Availability 98.35 %
Out of Range at: 02/21/2007 23:32:51 to 02/21/2007 23:59:51 :
27.00 minutes
Injector downtime: 02/21/2007 23:27:56 to 02/21/2007 23:59:46 :
31.83 minutes
Out of Range at: 02/22/2007 00:04:51 to 02/22/2007 01:05:41 :
60.83 minutes
Injector downtime: 02/21/2007 23:59:56 to 02/22/2007 01:03:21 :
63.42 minutes
Out of Range at: 02/22/2007 01:13:31 to 02/22/2007 01:13:41 :
0.17 minutes
Injector downtime: 02/22/2007 01:05:31 to 02/22/2007 01:13:31 :
8.00 minutes (est)
Out of Range at: 02/26/2007 15:35:21 to 02/26/2007 16:07:01 :
31.67 minutes
Injector downtime: 02/26/2007 15:30:26 to 02/26/2007 16:06:56 :
36.50 minutes

Period Beginning 03/07/2007 08:00
Current in Range 99.63 %
Injector Availability 99.59 %
Out of Range at: 03/08/2007 13:01:25 to 03/08/2007 13:27:15 :
25.83 minutes
Injector downtime: 03/08/2007 12:56:30 to 03/08/2007 13:25:05 :
28.58 minutes

Period Beginning 03/14/2007 08:00
Current in Range 100.00 %
Injector Availability 100.00 %

Period Beginning 03/21/2007 08:00
Current in Range 100.00 %
Injector Availability 100.00 %

Period Beginning 03/28/2007 08:00
Current in Range 100.00 %
Injector Availability 100.00 %

Period Beginning 04/04/2007 08:00

Current in Range 97.36 %

Injector Availability 97.21 %

Out of Range at: 04/05/2007 09:29:24 to 04/05/2007 11:46:34 :
137.17 minutes

Injector downtime: 04/05/2007 09:24:29 to 04/05/2007 11:46:29 :
142.00 minutes

Out of Range at: 04/05/2007 20:46:24 to 04/05/2007 20:54:24 :
8.00 minutes

Injector downtime: 04/05/2007 20:38:24 to 04/05/2007 20:46:24 :
8.00 minutes (est)

Out of Range at: 04/05/2007 23:36:44 to 04/05/2007 23:59:54 :
23.17 minutes

Injector downtime: 04/05/2007 23:31:49 to 04/05/2007 23:59:49 :
28.00 minutes

Out of Range at: 04/06/2007 07:05:24 to 04/06/2007 08:02:34 :
57.17 minutes

Injector downtime: 04/06/2007 07:00:29 to 04/06/2007 08:01:24 :
60.92 minutes

Period Beginning 04/11/2007 08:01

Current in Range 99.90 %

Injector Availability 99.81 %

Out of Range at: 04/12/2007 22:45:34 to 04/12/2007 22:46:04 :
0.50 minutes

Injector downtime: 04/12/2007 22:37:34 to 04/12/2007 22:45:34 :
8.00 minutes (est)

Out of Range at: 04/16/2007 11:12:23 to 04/16/2007 11:20:13 :
7.83 minutes

Injector downtime: 04/16/2007 11:04:23 to 04/16/2007 11:12:23 :
8.00 minutes (est)